Coal and Energy Development

Speech for Marty Huelsmann to the East Kentucky Power Annual Meeting

I. Introduction

A. Thanks for having me. Greetings from PSC.

B. A lot going on at the Commission right now

1. In Telecommunications

a. Competition issues

b. Broadband deployment --

2. Natural Gas Prices

3. Water - Gov's initiative

4. Electricity -- Mergers

C. Why I am here today - electricity.

D. Over the last 30 years, energy industry changed.

1. Oil embargoes of the 1970s

2. Environmental discussions of the 80s

3. New emission reduction requirements of the 1990s

E. As we move past the year 2000, a new energy paradigm.

F. In Kentucky, new paradigm can be opportunity.

1. **Highlight the technological advances in the use of coal**
2. **Historically low prices for electricity - econ. dev.**

G. I'm going to cover three major points today.

1. **First, I want to talk about how electricity generation has become central to our lives and to our economy, and why that makes planning for the future so important.**
2. **Second, I want to talk about some lessons that California taught us over this past year.**
3. **Finally, I want to talk about how Kentucky is evaluating the new energy paradigm, how coal fits into that new future, and what Kentucky is doing in an effort to act on lessons learned from California.**

II. First, Let's talk about how electricity generation has become central to our lives and to our economy.

A. Electricity central to Economic Development

1. **"Coal for the Future: Sustainable Development" by Mike Musulin, low priced electricity = better job prospects.**

2. **Kentucky - Historically low prices. Good for economic development.**

B. Demand for electricity continues to grow.

1. **EIA projects that by 2020, 1,310 new power plants, (300 MW), will be needed to meet growing electricity demand and to replace aging power plants.**
2. **The EIA also projects a 1.2% growth per year of energy consumption, with the most rapid growth being for computers, electronic equipment, and appliances.**
3. **For commercial energy consumption, a growth rate of 1.4% is projected, again, largely for the increased use of computer and electronic equipment and telecommunication needs.**
4. **EIA projects the demand of electricity itself to grow at a rate of 1.8% per year through 2020.**

C. We may be underestimating growth in demand for electricity.

1. **Although EIA uses "reliable" data, projections can be wrong.**
2. **According to Matthew Simmons, president of Simmons and Company, when the National**

Petroleum Council demand task force was preparing its long-term demand forecasts, they underestimated the growth in electricity demand by half. He says that in the year 2000, electricity demand grew twice as fast as the projected 2.1%.

3. **Underestimating growth in electricity demand contributed to the kinds of problems we're seeing now in California.**
   a. **1998, the California Energy Commission forecasted annual demand growth of 2.3% between 1998 and 2004.**
   b. **According to the Edison Electric Institute, the actual monthly peaks in the spring of 2000 ranged from 5.3% percent to 21 percent more than 1999.**

And that brings me to my next point -- California. The events unfolding in California hold lessons for the rest of us throughout the nation as we look at energy development in our state and in the country.

III. It is critical that we pay attention to the energy industry throughout the United States, particularly the events in California, and learn how to deal with the new paradigm in the energy industry.

- **A. The Situation.**
  1. **Depended on 25% of its energy coming from outside the state.**
  2. **Consumption up 20% - virtually no new plants.**
  3. **Utilities have been caught between soaring prices and price caps, and are now dealing with bankruptcy.**
  4. **The situation in California is affecting the prices of electricity in other states.**
     - **a. According to Arizona Governor Jane Hull, bills for one small Arizona utility were expected to rise 300% in February because of the energy crisis in California.**
     - **b. Kentucky prices now lowest because of impact of CA on western states.**
- **A. The Lessons**
  1. **Lesson One: Look before you leap.**
     - **a. The plan in California was bad from the start**
       - **i. removed price signals**

ii. capped utility rates, but not generation rates,
iii. eliminated long term contracts
iv. volatile spot market.

b. California didn't account for all the contingencies
i. Silicon Valley,
ii. transmission problems,
iii. Integrated Resource Planning abandoned in favor of market forces,
iv. siting problems.

2. Lesson Two: The Blame Game -- Political wrangling doesn't keep the lights on.
a. The state blames the Feds, the Feds blame the state.
i. Davis v. Bush. Hard lines drawn -- no solutions formed.
ii. Cal. AG, et al v. FERC - Lawsuits attempting to force action by FERC to relieve California.

b. Even with all the blame, nothing has changed the projections of the rolling blackouts in California this summer.

i. **NERC projects 15 hours a week of blackouts in CA this summer.**
ii. **Refineries are saying that unless they are exempt from the blackouts, the price of gasoline, already above $2.00, will climb even higher.**
iii. **An interesting side note: real estate values have grown much higher near hospitals because they are non-interruptible customers.**

c. **Diversity of Generation is important.**
   i. **Dependence on natural gas for generation. More diversity = less price impact**
   ii. **California did have other sources of generation, including nuclear -- proven to be very expensive, and hydro, which was in very low supply during such a dry year.**

Now that we've looked at the importance of electricity planning, and looked at the lessons learned from California, let me finally discuss for a few moments how Kentucky is applying those lessons as we look at

energy development and the use of coal in planning for the new energy paradigm..

IV. Kentucky and the new energy paradigm. As Kentucky learns lessons from California, and plans for its own energy future, it seems that there are several values that Kentucky holds onto as we plan for the future. These include 1. Low cost electricity, 2. The use of Kentucky coal, 3. Addressing Environmental concerns, and 4. Enhanced Economic Development.

A. Governor announced establishment of Energy Advisory Board. The goals of the board embrace all of the values I just mentioned in planning for Kentucky's electricity future. The Board will:

1. Develop a statewide energy policy.

2. Analyze energy markets throughout the country, and devise a strategy that maximized Kentucky's low cost advantages.

3. Recommend policies that promote affordable energy supplies, and improve reliability.

4. Recommend long-range energy resource development in the state.

5. **Analyze existing generation in relation to long-term demand for energy.**
6. **Look at the forecasting models, and determine energy demand based on economic growth in Kentucky.**
7. **Look at how plans for conservation can help meet future energy requirements.**
8. **Devise a strategy to maximize federal grant opportunities for energy research, with an emphasis on clean coal technology.**
9. **Look at options for utilities in Kentucky, and how they need to be positioned as the lines begin to blur with electricity restructuring happening all around us.**

B. **Merchant plants are another factor in Kentucky that the PSC does not really address, but the Board will be able to take into account.**
   1. **Notified of about 12 proposed in the state - no jurisdiction.**
   2. **Only two are coal (Ky. Pioneer and Kentucky Mountain Power)**
   3. **We don't know how many of these plants will become reality.**

4. **Board will likely examine the impact of these plants -- price and transmission capacity.**

C. **Good time for Coal.**

1. **Clean Coal Technology, good for Kentucky coal.**
2. **Neat projects from the Clean Coal Technology programs.**
    a. **Wabash River Project in Terre Haute Indiana**
    b. **EnviroPower project for Hazard, using fluidized bed technology.**
3. **Price-wise this is a good time for coal. Clean Coal Technology becomes cost effective when natural gas prices are at about $5.**
    a. **New Price floor for gas 4-5$ per Mcf.**
    b. **Projected 92% of new generation being fueled by natural gas, that new price floor is significant.**
4. **President and Vice President continuing to push for more exploration and drilling on federal lands = controversial**
    a. **Offer new coal as an alternative.**

b. lower emissions technology = less controversy

5. Mitch McConnell support for a plan offering money for research into cleaner-burning methods and tax breaks for utilities that use them. He stated "We haven't done nearly as much in that field as we should. We can produce this power cleanly."
6. Coal has been and will continue to be an important part of the generation of electricity in this country.
    a. 98% of Kentucky's power comes from burning coal.
    b. 55% of the nation's electricity comes from the use of coal in electric generation.
7. Important to remember the lesson from California: political wrangling won't keep the lights on.
    a. We have to recognize concern for environmental impact.
    b. Pursue Clean Coal technologies, but remember that the most effective and

efficient way to increase the use of coal is to take those environmental concerns seriously.

c. It is important to remember that the best strategy will address those concerns and will preserve the clarity of our air, the quality of our water, and the health of our citizens.

V. In conclusion, I have offered you a picture on where Kentucky stands in terms of coal and energy development. I have also demonstrated how our planning fits into what has gone on around us in this country, and the lessons that we can learn from those situations to protect the citizens of Kentucky.

A. Through a thorough examination of the situations around us, and how they relate to Kentucky, it is my hope that working together with all of the stakeholders, we can make a successful transition into the new energy paradigm.

B. Thanks for invitation to speak.

C. Always pleasure to meet with co-ops.

1. Informative, creative in thinking.

2. **Enjoy working with you and hearing from you.**
3. **All 22 of our co-ops provide a great service for Kentuckians, serving over 500,00 customers statewide.**
4. **It may interest you to know that I've talked with our Consumer Services staff about Co-ops specifically, and they have told me that only a small percentage of our total complaints annually come from our co-ops, with most co-ops only having a couple each year. Our investigators tell me that all of the RECCs are very easy to work with, and very responsive whenever contacted by our staff. We truly appreciate that. The positive relationship you have with your customers, and with our staff really makes our job much easier.**
5. **Thanks again, and I will be happy to take any questions that you may have at this time.**